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DISTRIBUTION CENTER PERSONNEL STUDY 1988

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The Food Marketing Institute (FMI) is a nonprofit association conducting programs in research, education and public affairs on behalf of its 1,600 members -- food retailers and wholesalers and their customers in the United States and overseas. FMI's domestic member companies operate approximately 17,000 retail food stores with a combined annual sales volume of $180 billion -- more than half of all grocery sales in the United States. Most of FMI's retail membership is composed of large multi-store chains, small regional firms and independent supermarkets. Its international membership includes more than 190 members from over 50 nations.

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INTRODUCTION

This report examines various aspects of the personnel who staff wholesale and retail distribution centers throughout the food distribution industry. Much of the data were gathered in a special survey done in early 1988. Other data were obtained from FMI's annual study of the industry, *The Food Marketing Industry Speaks, 1988* as well as several other FMI research publications.

The report begins with a discussion of various issues relating to distribution centers and personnel such as injuries, workers compensation claims, and employee assistance programs. A summary of the data collected in the study follows. The detailed tables from which the summary was drawn form the third section of the report.

ISSUES

DISTRIBUTION CENTER LABOR EXPENSES

A useful standard for comparison is distribution center volume at cost:

> the original cost of all merchandise passing through the center less discounts and allowances plus freight in charges.

Total salaries and wages in a typical center in the 1986-87 fiscal year accounted for 1.83 percent of volume at cost. Most of this (1.50 percent) went for direct labor. Supervision, administrative, and clerical salaries accounted for 0.23 percent, and indirect labor for 0.15 percent. Additionally, another 0.56 percent of total volume at cost was spent on fringe benefits and payroll taxes bringing total payroll costs to 2.53 percent.

EMPLOYEE INJURIES

This issue of job related injuries is becoming more prominent with the "graying" of the workforce as the baby-boom generation ages. The median age in the year 2000 is projected to be 36.3 according to the U.S. Bureau of the Census. An aging workforce tends to have more injuries and their medical costs tend to increase, particularly as they pass the age of 40.

Recent FMI research has shown that the cost of workers compensation claims in the distribution center have risen steadily over the past five years. The FMI *Customer and Employee Accident Survey* found that initial claims in 1983 cost 1.89 percent of total payroll dollars while the 1987 figure was 3.09 percent. The initial average claim in 1983 was $1,553, rising to $2,203 in 1987.

There are three basic ways of reducing injuries: 1) careful selection of workers; 2) good training for safe lifting; and 3) designing the job to fit the worker (ergonomics). All three of these can work in combination. An employee lacking the basic physical abilities to handle the necessary weights is at risk of injury no matter how well he is taught to lift. Thus screening is the most crucial control.

These processes must be effective as well as legally defensive in case of discrimination suits.

As shown in the following table, almost half the companies polled in this study have a program for training employees in proper lifting techniques. Slightiy more of the unionized companies have such a program in place.

PERCENTAGE OF RESPONDING COMPANIES CURRENTLY IMPLEMENTING LIFTING TRAINING PROGRAMS

	ALL COMPANIES	UNIONIZED COMPANIES	NON-UNIONIZED COMPANIES	BOTH
Companies with a training program	49.2%	51.4%	47.1%	44.4%
Companies without a training program	50.8%	48.6%	52.9%	55.6%
	100.0%	**100.0%**	**100.0%**	**100.0%**

A reduction in the weight of shipping containers will lead to a decrease in the instance of back injuries. A joint industry committee, drawn from the membership of the Food Marketing Institute (FMI), the National American Wholesale Grocer's Association (NAWGA) and the Grocery Manufacturers of America (GMA), is in the process of developing an action agenda for improving the productivity of the dry grocery distribution system through better shipping container design. The committee recognizes that the labor force is changing and includes workers not as physically strong as those previously employed. As part of the *Voluntary Guidelines on Dry Grocery Shipping Containers*, the committee recommended that the shipping container not weigh more than fifty pounds and, where possible, not more than forty-five pounds. The committee wrote:

> Excessive weight bears directly on the productivity and safety of warehouse and retail handling personnel. A significant reduction in back injuries through easier to handle containers would improve productivity and reduce Workmen's Compensation claims which are rapidly becoming a serious financial burden for the industry.

Bad pallets can also cause injuries requiring workers compensation. Splinters and lacerations from protruding nails are examples of pallet related injuries.

EMPLOYEE ASSISTANCE PROGRAMS (EAPs)

The human side of the workplace is no better illustrated than in the many problems which can affect employee performance. Substance abuse comes to mind immediately due to the considerable media exposure it has received in the past few years. Family problems, emotional problems, and financial problems affect performance more frequently than substance abuse and must be recognized as major threats to productivity. In the distribution center, an impaired employee presents a danger to himself and his co-workers and a liability to the company. Recognizing the pressures to which employees are subjected, many companies have begun Employee Assistance Programs which help employees with their problems while reducing absenteeism, lost time, workplace accidents, and health benefit costs.

As shown in the following table, 41 percent of the companies surveyed in this report have an EAP in place. As in the case the back injury programs, the incidence in unionized companies is slightly higher. Note that the majority of programs are run outside the company.

PERCENTAGE OF COMPANIES CURRENTLY IMPLEMENTING EAP PROGRAMS

	ALL COMPANIES	UNIONIZED	NON-UNIONIZED	BOTH
Companies with a formal EAP program	41.0%	45.7%	29.4%	44.4%
Companies without a formal EAP program	59.0%	54.3%	70.6%	55.6%
	100.0%	**100.0%**	**100.0%**	**100.0%**

As this table shows, only 1.6 percent of all responding companies ran the program within the company itself.

EAP program inside the company	1.6%	2.9%	—	—
EAP program outside the company	39.4%	42.8%	70.6%	55.6%
	41.0%	**45.7%**	**70.6%**	**55.6%**

SUMMARY OF STUDY RESULTS

PERSONNEL CHARACTERISTICS

The following paragraphs relate to the tables beginning on page 11. In the responding companies, approximately 85 percent of the workforce is employed full-time and the vast majority of workers are male — 96.5 percent of non-supervisory workers and 99 percent of supervisors. Only 2.5 percent of workers are salaried; the remaining 97.5 percent are paid hourly. A typical center had an annual turnover rate of 4.4 percent and an absenteeism rate of 3.6 percent.

The study looked specifically at supervisors. Over 93 percent of the supervisors in responding centers were salaried and 76.6 percent were not paid overtime. About 82 percent had completed their high school education while the remainder were college graduates. The majority of firms surveyed (87.2 percent) promote their supervisors up from the ranks of line personnel. Almost two thirds of these people had worked at the center for five years or longer.

ENGINEERED LABOR STANDARDS

Just over 55 percent of centers surveyed had engineered labor standards. The typical age of the standards varied uniformly across the sample; for example, 26.9 percent were one to two years old and 13.5 percent were nine to ten years old. Only 9.6 percent were 11 or more years old and 3.8 percent were in place less than a year.

Outside consultants aided in the development of the standards in 76.9 percent of the cases and input from employees and supervisors was used in 48.1 percent of the centers studied. Union involvement in standards development occurred in only 18 percent of the centers. This correlates with the fact that standards are included in the union contract in only one quarter of centers surveyed.

Implementation of the standards took varying amounts of time; most commonly 5 to 6 months (36.2 percent of centers studied), followed by seven or more months in 29.8 percent of the centers. Over 90 percent of the centers had training programs to implement standards.

All the respondents used standards to track individuals productivity. Almost 85 percent tracked shift productivity, three-quarters tracked area productivity and 63.5 percent planned shifts using engineered standards. Computers measured worker performance against the standards in the majority of cases (71.2 percent). Only 11.5 percent measured by supervisor observations.

PRODUCTIVITY IN DRY GROCERY DISTRIBUTION CENTERS

These data were collected as part of the annual *Food Marketing Industry Speaks* project. This summary is drawn from the tables beginning on page 28. The data show that employees in a typical center received 390 cases per direct labor hour and stored and replenished 18 pallets per direct labor hour. They selected 169 cases per direct labor hour and shipped 166 cases per direct labor hour for a total of 196,000 cases shipped per week.

PRODUCTIVITY IN FROZEN DISTRIBUTION CENTERS

The Speaks study found that a typical frozen center employed 18 people who received 488 cases per direct labor hour and stored and replenished 310 cases per direct labor hour. They selected 175 cases per direct labor hour and shipped 136 cases per direct labor hour for a total of 45,065 cases per week. The study also found that just over 51 percent of the centers surveyed operated eight to fourteen shifts per week.

DETAILED TABULATIONS

The following tables present the detailed results of the *Distribution Center Personnel Study, 1988.* Productivity data for dry grocery and frozen distribution centers are taken from the *Food Marketing Industry Speaks, 1988.* Aggregate data are provided for all responding companies and deliniated by size of center in total square feet.

DISTRIBUTION CENTER PERSONNEL

TABLE 1
TOTAL SIZE OF DISTRIBUTION CENTER IN SQUARE FEET

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	400000	250000	600000	94
SQUARE FEET (IN THOUSANDS)				
< 100	58000	44000	100000	11
101-350	260000	210000	300000	26
351-550	422500	383000	490000	32
551-750	669000	623290	741555	11
751-999	834000	770000	900000	6
OVER 1 MILLION	1584500	1357500	1999585	8

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 2
DAYS PER WEEK CENTER IN OPERATION

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	93	11	26	32	11	5	8
1 - 5 DAYS	18.3	45.5	23.1	12.5	18.2	-	-
6 DAYS	40.9	36.4	46.2	43.8	9.1	60.0	50.0
7 DAYS	40.9	18.2	30.8	43.8	72.7	40.0	50.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 3
TYPICAL NUMBER OF EMPLOYEES (FULL AND PART TIME)

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	232	132	381	92
SQUARE FEET (IN THOUSANDS)				
< 100	69	18	134	11
101-350	136	71	178	25
351-550	267	202	329	32
551-750	520	335	605	11
751-999	504	339	760	6
OVER 1 MILLION	1551	1049	1712	7

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 4
TYPICAL NUMBER OF CLERICAL EMPLOYEES (FULL AND PART TIME)

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	14	6	34	92
SQUARE FEET (IN THOUSANDS)				
< 100	3	0	10	11
101-350	9	3	20	25
351-550	14	8	22	32
551-750	26	11	55	11

DISTRIBUTION CENTER PERSONNEL

TABLE 5
TYPICAL NUMBER OF MANAGEMENT EMPLOYEES (FULL AND PART TIME)

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	5	3	11	92
SQUARE FEET (IN THOUSANDS)				
< 100	4	0	6	11
101-350	3	2	7	25
351-550	4	3	10	32
551-750	8	5	22	11
751-999	6	5	35	6
OVER 1 MILLION	20	8	72	7

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 6
TYPICAL NUMBER OF SUPERVISORY EMPLOYEES (FULL AND PART TIME)

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	15	6	26	92
SQUARE FEET (IN THOUSANDS)				
< 100	3	1	8	11
101-350	7	5	12	25
351-550	16	12	24	32
551-750	28	18	36	11
751-999	35	18	40	6
OVER 1 MILLION	59	0	74	7

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 7

TYPICAL NUMBER OF LINE-PERSONNEL EMPLOYEES (FULL AND PART TIME)

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	179	99	338	92
SQUARE FEET (IN THOUSANDS)				
< 100	41	16	80	11
101-350	106	60	145	25
351-550	221	150	254	32
551-750	452	300	500	11
751-999	451	290	625	6
OVER 1 MILLION	1328	920	1477	7

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 8

TYPICAL NUMBER OF FULL TIME EQUIVALENTS *

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	191	108	346	91
SQUARE FEET (IN THOUSANDS)				
< 100	62	18	80	10
101-350	141	60	186	26
351-550	227	170	285	32
551-750	500	321	773	11
751-999	494	190	619	6
OVER 1 MILLION	1425	518	1650	6

* A FULL TIME EQUIVALENT (FTE) IS A POSITION WITH 2080 HOURS PER CALENDAR YEAR

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 9

TYPICAL PERCENTAGE OF TOTAL CENTER WORKFORCE

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
PART TIME	14.7	11.0	14.1	14.0	20.7	4.7	23.5
FULL TIME	85.3	89.0	85.9	86.0	79.3	95.3	76.5

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 10

TYPICAL PERCENTAGE OF NON-SUPERVISORY WORKERS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	232770	797	103542	8597	6252	3246	110336
MEN	96.5	88.6	99.7	95.1	89.4	81.3	94.5
WOMEN	3.5	11.4	.3	4.9	10.6	18.7	5.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: WEIGHTED BY FULL AND PART TIME EMPLOYEES

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 11
TYPICAL PERCENTAGE OF SUPERVISORY WORKERS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	232770	797	103542	8597	6252	3246	110336
MEN	99.0	84.8	99.9	92.7	93.1	93.0	99.4
WOMEN	1.0	15.2	.1	7.3	6.9	7.0	.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: WEIGHTED BY FULL AND PART TIME EMPLOYEES

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 12
TYPICAL PERCENT OF SALARIED AND HOURLY EMPLOYEES

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	232770	797	103542	8597	6252	3246	110336
SALARIED	2.5	1.7	.3	5.3	1.5	0	4.6
HOURLY	97.5	98.3	99.7	94.7	98.5	100.0	95.4

NOTE: WEIGHTED BY FULL AND PART TIME EMPLOYEES

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 13
TYPICAL TURNOVER RATE AND ABSENTEEISM RATE

	ALL CENTERS	SQUARE FEET (IN THOUSANDS) < 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	327509	100638	3720	7445	6003	2512	207191
TURNOVER RATE	4.4	.1	14.5	12.0	20.5	9.9	5.7
ABSENTEEISM RATE	3.6	1.4	10.4	5.9	6.1	11.7	4.3

NOTE: WEIGHTED BY FULL TIME EMPLOYEES

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 14
EXTENT OF UNIONIZATION

	ALL CENTERS	SQUARE FEET (IN THOUSANDS) < 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	92	10	26	31	11	6	8
UNIONIZED	59.8	70.0	53.8	74.2	36.4	50.0	50.0
NON-UNIONIZED	26.1	20.0	38.5	12.9	45.5	16.7	25.0
BOTH	14.1	10.0	7.7	12.9	18.2	33.3	25.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 15

CENTERS WHO PROMOTE SUPERVISORS UP FROM THE RANKS OF LINE PERSONNEL

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
PROMOTE LINE PERSONNEL TO SUPERVISOR	87.2	90.9	84.6	90.6	90.9	50.0	100.0
DO NOT PROMOTE LINE PERSONNEL TO SUPERVISOR	12.8	9.1	15.4	9.4	9.1	50.0	-

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 16

TYPICAL PERCENTAGE OF CENTERS WHO PROMOTED WORKERS TO SUPERVISOR

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
ALL CENTERS	87	26	100	94
SQUARE FEET (IN THOUSANDS)				
< 100	85	50	100	11
101-350	90	17	100	26
351-550	80	25	100	32
551-750	85	60	96	11
751-999	50	10	95	6
OVER 1 MILLION	98	72	100	8

* A FULL TIME EQUIVALENT (FTE) IS A POSITION WITH 2080 HOURS PER CALENDAR YEAR

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 17

TYPICAL SENIORITY BEFORE PROMOTING TO SUPERVISOR

	ALL CENTERS	SQUARE FEET (IN THOUSANDS)					
		< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	83	8	21	30	11	6	7
1 YEAR OR LESS	3.6	12.5	4.8	-	-	16.7	-
2 YEARS	10.8	-	28.6	3.3	18.2	-	-
3 YEARS	10.8	12.5	4.8	10.0	18.2	33.3	-
4 YEARS	10.8	-	14.3	10.0	18.2	16.7	-
5 YEARS	31.3	12.5	14.3	50.0	27.3	16.7	42.9
6 OR MORE YEARS	32.5	62.5	33.3	26.7	18.2	16.7	57.1

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 18

TYPICAL PERCENT OF SUPERVISORS SALARIED AND HOURLY

	ALL CENTERS	SQUARE FEET (IN THOUSANDS)					
		< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
SALARIED	93.3	80.5	94.9	92.8	95.5	100.0	100.0
HOURLY	6.7	19.5	5.1	7.2	4.5	0	0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 19
PERCENTAGE OF SUPERVISORS PAID OVERTIME

	ALL CENTERS	SQUARE FEET (IN THOUSANDS)					
		< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
SUPERVISORS ARE PAID OVERTIME	23.4	45.5	11.5	25.0	18.2	16.7	37.5
SUPERVISORS ARE NOT PAID OVERTIME	76.6	54.5	88.5	75.0	81.8	83.3	62.5

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 20
TYPICAL EDUCATION OF FRONT-LINE SUPERVISORS

	ALL CENTERS	SQUARE FEET (IN THOUSANDS)					
		< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
COLLEGE GRADUATES	17.9	15.4	14.5	20.2	24.1	21.2	11.0
HIGH SCHOOL GRADUATES	82.1	84.6	85.5	79.8	75.9	78.8	89.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 21

TYPICAL PERCENTAGE OF COMPANIES WITH ENGINEERED LABOR STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	94	11	26	32	11	6	8
HAVE ENGINEERED LABOR STANDARDS	55.3	36.4	42.3	68.8	45.5	83.3	62.5
DO NOT HAVE ENGINEERED LABOR STANDARDS	44.7	63.6	57.7	31.3	54.5	16.7	37.5

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 22

TYPICAL PERCENTAGE OF COMPANIES WITH PLANS TO IMPLEMENT STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	41	7	15	9	6	1	3
PLAN TO IMPLEMENT STANDARDS	39.0	28.6	40.0	44.4	50.0	-	33.3
1988	19.5	-	20.0	22.2	50.0	-	-
1989	12.2	14.3	13.3	22.2	-	-	-
1990	7.3	14.3	6.7	-	-	-	33.3
DO NOT PLAN TO IMPLEMENT STANDARDS	61.0	71.4	60.0	55.6	50.0	100.0	66.7

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 23

TYPICAL AGE OF ENGINEERED LABOR STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
LESS THAN 1 YEAR	3.8	-	9.1	-	-	-	20.0
1 - 2 YEARS	26.9	50.0	36.4	31.8	-	-	20.0
3 - 4 YEARS	19.2	25.0	-	22.7	-	80.0	-
5 - 6 YEARS	15.4	-	27.3	13.6	40.0	-	-
7 - 8 YEARS	11.5	25.0	9.1	9.1	-	20.0	20.0
9 - 10 YEARS	13.5	-	9.1	13.6	40.0	-	20.0
11 + YEARS	9.6	-	9.1	9.1	20.0	-	20.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 24

TYPICAL LENGTH OF TIME FROM INITIAL DESIGN TO IMPLEMENTATION OF STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	47	4	9	20	5	4	5
0 MONTHS	2.1	-	-	-	-	-	20.0
1-2 MONTHS	8.5	75.0	11.1	-	-	-	-
3-4 MONTHS	23.4	-	11.1	35.0	20.0	-	40.0
5-6 MONTHS	36.2	25.0	55.6	35.0	-	75.0	20.0
7 + MONTHS	29.8	-	22.2	30.0	80.0	25.0	20.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 25
TYPICAL PARTNER INVOLVED WHEN DEVELOPING STANDARDS

	ALL CENTERS	SQUARE FEET (IN THOUSANDS) < 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
OUTSIDE CONSULTANT	76.9	50.0	72.7	77.3	80.0	100.0	80.0
IN-HOUSE WITH EMPLOYEE AND SUPERVISOR INPUT	48.1	50.0	63.6	45.5	60.0	20.0	40.0
IN-HOUSE WITH COMPUTER SOFTWARE	21.2	-	18.2	22.7	40.0	40.0	-

NOTE: MULTIPLE RESPONSES ALLOWED

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 26
TYPCIAL UNION INVOLVEMENT IN DEVELOPING STANDARDS

	ALL CENTERS	SQUARE FEET (IN THOUSANDS) < 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	50	4	10	22	5	4	5
UNION WAS INVOLVED IN DEVELOPING STANDARDS	18.0	50.0	20.0	13.6	20.0	-	20.0
UNION WAS NOT INVOLVED IN DEVELOPING STANDARDS	82.0	50.0	80.0	86.4	80.0	100.0	80.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 27
ENGINEERED STANDARDS INCLUDED IN UNION CONTRACT

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	48	4	9	22	4	4	5
UNION HELPED IN THE DEVELOPMENT OF THE STANDARDS	25.0	-	44.4	22.7	-	50.0	20.0
UNION DID NOT HELP IN THE DEVELOPMENT OF THE STANDARDS	75.0	100.0	55.6	77.3	100.0	50.0	80.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 28
FREQUENCY OF UPDATING LABOR STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	51	4	11	22	5	4	5
NONE	17.6	25.0	9.1	27.3	20.0	-	-
MONTHLY	7.8	-	18.2	4.5	-	25.0	-
QUARTERLY	21.6	25.0	36.4	18.2	-	25.0	20.0
OTHER	52.9	50.0	36.4	50.0	80.0	50.0	80.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 29

CENTERS WITH TRAINING PROGRAMS TO IMPLEMENT STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
HAVE TRAINING PROGRAMS TO IMPLEMENT THE STANDARDS	90.4	75.0	100.0	90.9	80.0	80.0	100.0
DO NOT HAVE TRAINING PROGRAMS TO IMPLEMENT THE STANDARDS	9.6	25.0	-	9.1	20.0	20.0	-

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 30

TYPICAL METHODS TO MEASURE EMPLOYEES AGAINST THE STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
BY COMPUTER	71.2	25.0	72.7	77.3	80.0	60.0	80.0
SUPERVISOR OBSERVATION	11.5	50.0	9.1	4.5	20.0	20.0	-
OTHER	17.3	25.0	18.2	18.2	-	20.0	20.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 31
TYPICAL USES OF ENGINEERED STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
PLAN SHIFTS	63.5	50.0	54.5	72.7	80.0	60.0	40.0
TRACK INDIVIDUALS PRODUCTIVITY	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TRACK AREA PRODUCTIVITY	75.0	50.0	72.7	77.3	100.0	60.0	80.0
TRACK SHIFT PRODUCTIVITY	84.6	75.0	72.7	100.0	60.0	100.0	60.0

NOTE: MULTIPLE RESPONSES ALLOWED

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

DISTRIBUTION CENTER PERSONNEL

TABLE 32
TYPICAL INCENTIVES USED TO MOTIVATE WORKERS TO MEET ENGINEERED STANDARDS

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
EXTRA PAY	30.8	75.0	36.4	22.7	60.0	-	20.0
EXTRA TIME OFF	17.3	25.0	9.1	13.6	60.0	-	20.0
OTHER	26.9	25.0	27.3	27.3	40.0	20.0	20.0

NOTE: MULTIPLE RESPONSES ALLOWED

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 33
WHAT DISCIPLINARY METHODS ARE USED FOR THOSE WHO FAIL TO MEET STANDARDS? INDICATE ORDER OF IMPLEMENTATION

		SQUARE FEET (IN THOUSANDS)					
	ALL CENTERS	< 100	101-350	351-550	551-750	751-999	OVER 1 MIL
TOTAL	52	4	11	22	5	5	5
FIRST IMPLEMENTATION							
VERBAL WARNINGS	92.3	100.0	100.0	81.8	100.0	100.0	100.0
WRITTEN WARNINGS	1.9	-	-	4.5	-	-	-
SUSPENSIONS	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-
SECOND IMPLEMENTATION							
VERBAL WARNINGS	-	-	-	-	-	-	-
WRITTEN WARNINGS	88.5	100.0	100.0	81.8	100.0	80.0	80.0
SUSPENSIONS	3.8	-	-	4.5	-	20.0	-
OTHER	-	-	-	-	-	-	-
THIRD IMPLEMENTATION							
VERBAL WARNINGS	-	-	-	-	-	-	-
WRITTEN WARNINGS	1.9	-	-	-	-	20.0	-
SUSPENSIONS	80.8	100.0	90.9	81.8	60.0	60.0	80.0
OTHER	5.8	-	-	4.5	40.0	-	-
FOURTH IMPLEMENTATION							
VERBAL WARNINGS	-	-	-	-	-	-	-
WRITTEN WARNINGS	-	-	-	-	-	-	-
SUSPENSIONS	-	-	-	-	-	-	-
OTHER	44.2	25.0	36.4	59.1	40.0	20.0	40.0

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 34
PROFILE OF COMPANIES

				1987 SALES (MILLIONS OF DOLLARS)			
	TOTAL COMPANIES	RETAIL COMPANIES	WHOLESALE COMPANIES	UNDER 101	101-250	251-500	OVER 500
ALL COMPANIES	91	54	37	9	9	16	45
RETAILERS	59.3	100.0	-	22.2	22.2	62.5	66.7
COOPERATIVE WHOLESALERS	14.3	-	35.1	33.3	22.2	18.8	11.1
VOLUNTARY WHOLESALERS	24.2	-	59.5	44.4	44.4	18.8	20.0
UNAFFILIATED WHOLESALERS	2.2	-	5.4	-	11.1	-	2.2

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 35

TYPICAL NUMBER OF CASES RECEIVED PER DIRECT LABOR HOUR IN DRY GROCERY DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	390	272	845	109
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 100,000	200	102	417	12
100,000-199,999	720	280	1100	22
200,000-299,999	356	318	723	25
300,000-399,999	720	350	1025	21
400,000 OR MORE	376	250	678	26

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 36

TYPICAL NUMBER OF PALLETS STORED AND REPLENISHED PER DIRECT LABOR HOUR IN DRY GROCERY DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	18	13	24	94
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 100,000	18	8	31	8
100,000-199,999	18	15	21	18
200,000-299,999	18	15	22	21
300,000-399,999	15	12	24	19
400,000 OR MORE	17	13	24	25

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 37

TYPICAL NUMBER OF CASES SELECTED PER DIRECT LABOR HOUR IN DRY GROCERY DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	169	143	210	120
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 100,000	130	90	185	13
100,000-199,999	169	145	200	26
200,000-299,999	177	156	208	29
300,000-399,999	169	125	250	21
400,000 OR MORE	164	140	184	28

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 38

TYPICAL NUMBER OF CASES SHIPPED PER DIRECT LABOR HOUR IN DRY GROCERY DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	166	102	580	105
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 100,000	184	100	304	12
100,000-199,999	135	102	567	22
200,000-299,999	188	102	525	24
300,000-399,999	150	85	253	21
400,000 OR MORE	441	103	880	23

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 39

TYPICAL NUMBER OF EMPLOYEES IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	18	7	35	124
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	2	2	4	17
10,000-19,999	6	3	11	18
20,000-39,999	18	8	27	27
40,000-79,999	28	20	50	36
80,000 OR MORE	54	29	88	20

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 40

TYPICAL NUMBER OF CASES SHIPPED PER WEEK IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	45065	20000	84000	118
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	5354	2100	7957	14
10,000-19,999	17977	11525	36500	16
20,000-39,999	40000	24000	50000	27
40,000-79,999	79850	55687	111733	36
80,000 OR MORE	100000	80163	203773	20

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 41

TYPICAL NUMBER OF CASES RECEIVED PER DIRECT LABOR HOUR IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	488	277	912	96
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	568	250	800	14
10,000-19,999	508	228	850	12
20,000-39,999	425	280	950	20
40,000-79,999	583	307	1113	32
80,000 OR MORE	432	225	504	16

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

TABLE 42

TYPICAL NUMBER OF CASES STORED AND REPLENISHED PER DIRECT LABOR HOUR IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	310	30	640	79
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	60	18	1013	12
10,000-19,999	150	25	409	8
20,000-39,999	311	142	530	19
40,000-79,999	494	32	723	25
80,000 OR MORE	335	60	527	13

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

FROZEN DISTRIBUTION CENTER

TABLE 43

TYPICAL NUMBER OF CASES SELECTED PER DIRECT LABOR HOUR IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	175	145	210	111
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	192	107	202	16
10,000-19,999	175	150	200	17
20,000-39,999	163	145	200	22
40,000-79,999	181	156	220	34
80,000 OR MORE	180	138	213	19

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988

FROZEN DISTRIBUTION CENTER

TABLE 44

TYPICAL NUMBER OF CASES SHIPPED PER DIRECT LABOR HOUR IN FROZEN DISTRIBUTION CENTER/SECTION

	MEDIAN	MIDDLE RANGE		NUMBER PARTICIPATING
TOTAL CENTERS	136	96	233	96
SIZE OF DISTRIBUTION CENTER/SECTION				
LESS THAN 10,000	160	120	250	15
10,000-19,999	130	102	320	13
20,000-39,999	138	105	200	19
40,000-79,999	131	88	334	32
80,000 OR MORE	135	92	200	15

NOTE: UNWEIGHTED DATA

SOURCE: FOOD MARKETING INSTITUTE, FOOD MARKETING INDUSTRY SPEAKS, 1988